

Amphenol®



Amphenol® Tru-Loc® Rugged Environment Connector featuring RADSOK® Contacts

Amphenol Industrial Products Group introduces a connection system family with 1.5 mm socket contacts featuring Amphenol's exclusive RADSOK® contact system. The new Tru-Loc connector series is designed to perform in demanding environments, such as under valve covers on diesel engines and in high vibration sensor applications.

Tru-Loc features a molded thermoplastic main plug body with secondary latch and a fluoroelastomer main joint seal that is resistant to many fluids, including diesel fuel.

The Tru-Loc series includes 2-way, 4-way, and 6-way inline plugs and receptacles. Our engineering team can also design this series to mate to a device, sensor, fuel injector, splitter, pass through connector, and more. Special backshells can be designed for the 6-way series, and we can meet 150°C temperatures upon request. These connection systems are RoHS compliant and seal to IP67 when mated. They are rated for high vibrations at 32 Grms.

Features:

- 2, 4, or 6 pin connector with 1.5mm RADSOK® featured contacts
- Plug body with secondary latch
- Fluoroelastomer main joint seal and silicone rubber wire seals to support IP67 rating
- Dielectric withstanding voltage is 1600 Vac RMS
- 13 Amp current rating
- Insulation resistance can meet 100 M Ohms
- Matting force less than 70N
- Contact retention between 60~80N
- Operating temperature can meet -40°C to +125°C, 100 cycles, 1 hour per cycle
- Durability is 20 mating cycles

Material Specification

Plug with RADSOK® Socket Contacts

Plug Body

Nylon

Wire Seal

Silicone

Main Joint Seal

Fluoroelastomer

Socket Contact

Copper Alloy w/ Stainless Steel Hood

Receptacle with Pin Contacts

Receptacle Body

Copper Alloy

Pin Contact

Copper Alloy

Electrical Specifications

Dielectric Withstanding Voltage (Test Voltage)

1600 Vac RMS

Current Rating

13 amp (DC) (16 AWG Cable)

Insulation Resistance

100 M Ohms

Mechanical Specifications

Connector Mating Force

<70 N (15.7 lb)

Contact Retention

Primary Only: 80 N (18.0 lb)

Secondary Only: 60 N (13.5 lb)

Vibration

32 g RMS

Operating Temperature Range

-40°/+125°C, 100 cycles, 1 hour per cycle

Ingress Protection

IP67

Durability (Mating Cycle)

20 cycles

AIPG Part Number**Description****Additional Information**

10-838275-000

2way Plug (Plug Body, Locking Collar, and Main Joint Seal)

10-707003-002

4way plug (Plug Body, Locking Collar, and Main Joint Seal)

10-707508-02X(X: A,B,C,D)

6way plug (Plug Body, Locking Collar, and Main Joint Seal)

4 indexes available

10-707516-001

2way receptacle

10-707517-001

4way receptacle

10-707509-00X(X: A,B,C,D)

6way receptacle

4 indexes available

10-838137-00D

Wire seal (silicone)

To be used with insulated wires

with insulation between 1.2-2.1 mm.

10-838351-002

Stamped and formed female socket, Au+PdNi plating

Crimps to wire from 0.8-1.3 sq. mm

10-707515-002

Stamped and formed male pin, Au+ PdNi plating

Crimps to wire from 0.8-1.3 sq. mm

10-707515-0M2

Machined male pin, Au+PaNi plating

Crimps to wire from 0.8-1.3 sq. mm

- * Socket Contacts are available on reels of 4,000 pieces
- * For Crimp Information please contact factory
- * Cable seals are sold separately and must be used in all cavities and on both sides of the connection system

For additional information on the Amphe-Power® family of connectors with RADSOK® Technology, please ask for our RADSOK® Catalog (SL-391) or download it from the Catalogs section of our website.

